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ABSTRACT

This study investigated the characteristics and experiences of 59 college students accelerated from their freshman to their junior year. The students showed high academic performance and few social problems, but questions of personal identity remained problematic; the best single predictor of academic success was found to be freshman grade-point average. The students consistently reported as benefits saving money, getting a job or going to graduate school earlier, using the fourth year to do something different (travel or work experience), and avoiding unnecessary courses. Initial enthusiasm for the acceleration program came about also because of an interest in small classes and belonging to an "experimental community." (Author/MSE)

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An Experiment in "Less Time, More Options": A Study of Accelerated University Students

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ABSTRACT

An Experiment in "Less Time, More Options":
A Study of Accelerated University Students

This study investigated the characteristics and experiences of college students accelerated from their freshman to their junior year. The students (N=59) showed high academic performance and few social problems, but questions of personal identity remained problematic; the best single predictor of academic success was found to be freshman grade point average. The students consistently reported benefits of saving money; getting a job or going to graduate school earlier; using the fourth year to do something different (e.g. travel or work experience); and avoiding unnecessary courses. Initial enthusiasm regarding the program was indicative also of an interest in small classes and belonging to an "experimental community."

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INTRODUCTION

The Carnegie Corporation made a decision in the summer of 1972 to support an experiment at Bowling Green State University which promised to develop an option allowing students to reduce the time they spent on campus by as much as one year without reducing the quality of the baccalaureate. To a modest degree, the aspirations of Carnegie and the local builders of the program at BGSU have succeeded. The first graduates emerged from the program in the Winter and Spring of 1975 (two and one-half, or three years after they entered), and the option which was initiated under the Modular Achievement Program (MAP) was established as a permanent offering of the University and renamed the Time-Flexible Degree Option.

The debate on the institutionalization of the program was relatively short. Partially accountable for that shortness were faculty inclinations that granting students such an option made sense, not all students need stay at BGSU in a lock-step four-year program. The approval of the option was also aided by the fact that student interest in the time-shortened degree turned out to be limited, and initial faculty fears of BGSU becoming a three-year degree mill were put aside.

The study that is reported here is, essentially, a follow-up on the accelerated students at BGSU via the MAP Project. It is a sequel to the original study, "An Experiment in 'Less Time'; A Study of 31 Students Accelerated at Bowling Green State University", and is in keeping with the commitment of the original MAP proposal to comprehend fully the impact and consequences of the program on students.

This study goes considerably beyond a simple replication of the earlier study, though. It not only examines the experience of the second group of accelerated students, but it extends the analysis by combining both groups of students (those

accelerated in 1973 and 1974) thus allowing for more reliable generalizations. A brief look is also taken at the accelerated students who had graduated at the time of the study, June, 1975. The confirmations and deviations from the first study which were found support the belief that a one-time appraisal of the concept would have been inadequate.

The questions that provide the focus of the study were: How did the experience of the second group of accelerated students compare with that of the first group? What general conclusions can be drawn about the junior year of the accelerated student? What best predicts the junior year academic performance? What was the experience of the 3-year graduate with employers and graduate schools?

Since this report is "part two" of a longitudinal study, it will not repeat either what has been previously discussed about the context of acceleration at BGSU or the historical analysis of the concept.[1] Nevertheless, it is important to review, briefly, the mode of acceleration these particular students experienced.

The Mode of Acceleration

Briefly, all of the students in this study were accelerated to their junior year by a grant of credit ranging from 38 to 45 quarter hours. The amount of credit granted depended upon the number of hours a student needed to obtain junior status at BGSU (junior status = 90 hours). This credit was granted by individual colleges on the basis of the student's performance in the freshman year. Primary measures of this performance included the grade point average and scores on the Undergraduate Record Exams; grades in English Composition and scores on a test of critical thinking ability (Watson-Glaser Critical Thinking Appraisal) were also considered.

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[1] A discussion of these topics is included in "An Experiment in 'Less Time'; A Study of 31 Students Accelerated at Bowling Green State University," University Division of General Studies, BGSU, November, 1974. The reader may also wish to review the monograph, Time-Shortened Degrees by Charles W. Meinert, (ERIC/Higher Education Research Report No. 8, 1974) for a more thorough discussion of the time-shortened degree movement.

PROCEDURE

While a total of 76 students were accelerated in the first two years of the MAP Project, this study focuses only on those students who had either graduated, or were currently enrolled at BGSU in Arts and Sciences, Education, and Health and Community Services. Students in the College of Business Administration were accelerated in a markedly different fashion from those in the above colleges and were, therefore, not included in the study. This difference consisted primarily of fewer hours being granted to the student, so that acceleration produced no real quantitative jump in the student degree program.

At one time it was expected that this study would examine only two groups of students: those students who were graduating, and those experiencing their first year of accelerated status. This was, however, not to be the case, as only eleven of the first group of students had graduated at the time of the study. This fact, plus the discovery that some accelerated students had left BGSU after being accelerated, caused us to regroup the students into four groups for purposes of analysis. These four groups are described below. (Since it became useful to refer to the first group of accelerated students as MAP I students, and the second group as MAP II students, we have continued these designations in the report.)

MAP II as Juniors (N=28)

This group is composed of MAP II students who were accelerated to junior status in 1974, and had just completed their junior year at the time of the study. Twenty-one of these students participated in MAP and seven were part of a comparison group.[2]

[2]These students were from a comparison group of 113 freshmen students. While it had been intended that there would be approximately an equal number of students accelerated from this group, only 16 of the students expressed an interest; 9 of whom were eventually accelerated (2 of whom were in Business Administration and, therefore, not included in this study). The remaining group of 7 students has been included in the MAP II total since no major differences distinguish them from the MAP students with the exception that all MAP students took the Little College, a 5-credit course devoted to the development of critical thinking skills.

MAP I and MAP II as Juniors (N=59)

This group consists of the twenty-eight MAP II students described above with the original thirty-one MAP I students. The analysis combines the data collected at the end of the junior year for each group.

MAP I Graduates (N=11)

This group consisted of eleven accelerated students from MAP I who had graduated prior to the time the collection of data was completed for this study (June, 1975).

MAP II Transfers/"Stop-Outs" (N=8)

This group consisted of eight MAP II students who either transferred to other institutions or "stopped-out" prior to the completion of their junior year at Bowling Green. There were no transfer/"stop-outs" in MAP I.

Data regarding the above groups were gathered through the use of survey questionnaires, group discussion, interviews, and student records.

The identical questionnaire used in the original follow-up study of MAP I students was completed by the MAP II students including those students from the comparison group. A similar questionnaire, with appropriate modifications, was designed for the seniors who were either graduating during Spring Quarter or had already graduated. For those students who had transferred or "stopped out," a short questionnaire was constructed and sent to them.

A group discussion was held with MAP II students during Winter Quarter of their junior year. Students in MAP II who were part of the comparison group met separately during the same quarter. Both discussions were tape-recorded as had been the earlier discussions with MAP I students. Using a standardized format, interviews were also conducted with MAP I seniors who were graduating. These interviews took place in early June, 1975.

Colleges and Majors of the Accelerated Students

While the grouping of the accelerated students in the fashion outlined above

was most useful for analytic purposes, there are times when students are referenced in relation to their college affiliation. Table 1 presents the 59 accelerated students used in this study by college and year. This analysis finds equal numbers of students (29) in Education and Arts and Sciences; and, nearly equal numbers of students (31 and 28) accelerated during 1973 and 1974.

Table 1: Accelerated Students by College and Year

College	MAP I (1973)	MAP II* (1974)	TOTAL
Education	18	11	29
Arts & Sciences	12	17	29
Health & Community Services	1	0	1
Totals	31	28	59

*Includes 7 students from the comparison group; excludes 8 students who transferred or left school.

The majors of these students (at the time they returned for their junior year) are reported in Table 2. Outside of Elementary Education majors, who numbered eleven, there is no concentration of accelerated students in any major field. The only categories in which there were more than two students were Psychology (4), Political Science (3) and Undecided (6).

Table 2: Majors of Accelerated Students* (N = 58)

Education		Arts and Sciences	
Major	Number	Major	Number
Elementary Education	11	Philosophy	2
Special Education	1	Psychology	4
Political Science	1	English	1
Speech	2	Political Science	3
Deaf HH/Elem. Ed.	1	Liberal Studies	2
Business Education	1	Sociology	2
Mathematics	1	History	1
Recreation	1	Art	1
Secondary PER	1	Speech	1
Biology	1	Computer Science	2
German	1	Mathematics	1
Latin American Studies	1	American Studies	2
Early Childhood	1	Environmental Studies	1
English	1	Chemistry	1
Foods/Nutrition	1	Undecided	6
Newswriting/Editing	1	Biology	1

* These figures do not include 8 students who either transferred to another school or took a year off; 9 students in the College of Business Administration; and 1 student in Health and Community Services. The data were compiled upon the return of the accelerated students for their Junior Year at BGSU.

THE PROFILE OF THE ACCELERATED STUDENT

The profile of the MAP I students, as outlined in the first follow-up study, showed records of high academic achievement as measured by grades during high school and the freshman year. In relation to both other MAP students and non-MAP students, they also exhibited superior examination scores (ACT Composite and Undergraduate Record Exams). MAP I students also possessed characteristics of critical thinkers and intellectually-oriented students more than other students both at BGSU and nationally.[3] This general profile of a very academically able student remained intact for MAP II students, and, in some instances, became even more pronounced.

MAP II students were at the 90th percentile of their high school class. They came to BGSU with an ACT Composite score of 27.5 compared to a score of 21.9 for the 1973 BGSU freshman norm (the mean score for MAP I students was 26.3; standard deviation for the ACT is approximately 4.5). MAP II students had a mean GPA of 3.60 for their freshman year compared to 3.56 for MAP I students.

On the Undergraduate Record Exams, the MAP II students achieved mean scores of 515 (Social Science), 531 (Humanities) and 613 (Natural Sciences). This compared favorably to mean scores of 414, 459, and 471, respectively, for an ETS national sample of 11,000 sophomores. These differences represented scores of approximately one standard deviation above the national norm.

On a test of critical thinking skills, the MAP II students had an average score of 78 (s.d. = 8.4) compared to MAP I students' score of 74 (s.d. = 7.6). The 25 MAP II students who completed the Omnibus Personality Inventory also scored higher on measures of Thinking Introversion, Theoretical Orientation, Estheticism and Complexity than did MAP I students.

In sum, MAP II students, like their predecessors, can be characterized as well above average in terms of academic ability.

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[3] See page 7 of the first report, "An Experiment in 'Less Time'" cited earlier.

ACADEMIC PERFORMANCE DURING THE JUNIOR YEAR

Using GPA as the criterion for determining academic performance, the results for MAP II students are reported in Table 3. The mean GPA for the junior year for MAP II students was 3.51. This is slightly lower than the mean GPA attained by MAP I students in their junior year (3.61). The difference was accounted for mostly by the MAP II performance in the fall quarter (3.39), the only quarter for either MAP I or MAP II students below a mean GPA of 3.50. MAP II accelerated students in Education had a GPA of 3.49, and those in Arts and Sciences had a GPA of 3.53.

Table 3: Average Grade Point Average of MAP II Students as Freshmen (1973-74) and Juniors.

	Freshman GPA	Junior Year			Junior GPA
		Fall	Winter	Spring	
Total Group (N=28)	3.60	3.39	3.56	3.63	3.51
Arts & Sciences (N=17)	3.62	3.41	3.61	3.62	3.53
Education (N=11)	3.37	3.35	3.49	3.63	3.49

Table 4 examines consistency between groups (MAP I and II), between colleges (A & S and Education), and across the academic year. The results show that, with the one exception mentioned above, academic performance for the accelerated students was consistent across year and college for both MAP I and MAP II. The total group had a GPA of 3.57 as juniors; the total group of Arts and Sciences

students had a GPA of 3.60; and the total group of Education students had a GPA of 3.55.

Table 4: Mean Grade Point Average (GPA) of Accelerated Students as Freshmen and Juniors.

	Freshman GPA	Junior Year			Junior GPA
		Fall	Winter	Spring	
Total Group * (n=59)	3.58	3.55	3.56	3.61	3.57
MAP I * (n=31)	3.56	3.71	3.55	3.58	3.61
MAP II (n=28)	3.60	3.39	3.56	3.63	3.51
Arts & Sciences (n=29)	3.67	3.62	3.[illegible]7	3.64	3.60
Education (n=29)	3.52	3.51	3.52	3.61	3.55

*Includes one student from the College of Health & Community Services

OTHER ASPECTS OF ACCELERATION DURING THE JUNIOR YEAR

The initial report on the accelerated students concluded that, overall, they had received a number of advantages and experienced very few social or personal problems as a result of acceleration. Nevertheless, we again focused heavily on other aspects of acceleration (besides academic performance) to examine the possibility that no "small" problems or concerns had become magnified for a second group of students.

Advantages

The "reality" of getting a degree in three years, as for MAP I students, was not available to all MAP II students. Twelve (43%) of the MAP II students said they would graduate in three years or less, 8 (29%) said they would graduate in less than four years, and 8 (29%) believed they would graduate in four or more years. This is lower than for MAP I students; 50% of MAP I students said they would graduate in three years or less. It should be noted, however, that this may or may not coincide with what will happen since these reports were done in mid-stream, although most students have their academic plans largely completed by the end of their junior year.

The matter of prerequisites was again seen as a major stumbling block for graduating in less time, and students felt strongly that this should not be the case. In several instances, they suggested they could have taken some prerequisites in their freshman year instead of the group requirements. They would have done this had they known more about how acceleration works (i.e., essentially certifying the completion of group requirements).

The major advantages of acceleration to either "a major or minor extent" as perceived by MAP II students involved saving money (64%), getting a job or going to graduate school earlier (54%), and using the fourth year to do some-

thing they would normally be unable to do (53%).

Sixty-four percent of the students did not perceive the adding of another major as a possibility at all, and 75% of the students saw the advantage of taking other classes either "not at all" or "to a minor extent." These results are reported in Table 5.

Summary data on the combined group of MAP I and MAP II students are also reported in Table 5. For the total group, the advantages of acceleration "to a major extent" revolved around saving money (49%); getting a job or going to graduate school earlier (43%); and, using the 4th year to do something they otherwise would not have been able to do (39%).

Disadvantages

A special concern of these studies has been to determine whether the pressures of acceleration have caused students to rush into decisions about selecting a major or possible career.

Twenty (72%) of the MAP II students said "no" they did not feel rushed into making a decision about their future career; four students (14%) responded they were uncertain as to whether they had been rushed or not. Twenty-one (75%) of the students felt that they had not been rushed into a decision about a major.

For the total group of both MAP I and MAP II students, 73% said they did not feel rushed into making a future career decision; seventy-one percent felt that they had not been rushed into making a decision about a major.

MAP II students also were asked "Are you concerned that you have missed something as a result of your acceleration, whether that be academic, personal, or social?" Twenty-one students (75%) said "no", and seven students (25%) said "yes". Three of the latter students noted that what was missing revolved around courses they would not be able to take, while three others felt that part of

Table 5: Advantages of Junior Standing as Perceived by Accelerates (Percentages)

Item	To a Major Extent		To a Minor Extent		Not at all		To a Major Extent	To a Minor Extent	Not at all
	MAP I	MAP II	MAP I	MAP II	MAP I	MAP II	MAP I & II		
I could take classes I otherwise would not have been able to take.	33	25	44	43	22	32	29	44	27
Have another major.	22	18	15	18	63	64	20	16	64
Use my fourth year doing something I would otherwise not have been able to, for example, travel or work experience.	35	44	35	16	30	40	39	26	35
Save money.	56	43	11	21	33	36	49	16	35
Get a job or into graduate school a year earlier.	46	40	15	20	39	40	43	18	39

(N=55)

the social aspect of college would be missed. One student felt that, while there was something missed, he had gained much more than he had lost.

For the total group of MAP I and MAP II students, 67% of the students responded "no" to the question of something missed; thirty-three percent responded "yes", with the majority of these students responding that what was missed was mainly the opportunity to take more elective courses.

When it came to questions regarding personal identity, where they were headed, and what they were seeking in life, seven (25%) of the MAP II students said this was "no problem"; five (18%) said it was a "major problem"; and sixteen (57%) said it was "somewhat problematic." This distribution closely approximated the responses of the MAP I students. For the combined group, 24% said "no problems"; 16% said "a major problem; and, 60% said "somewhat problematic."

General Comments

The last series of questions asked MAP II students were of a summary nature and are reported in Table 6 along with the responses of MAP I students and the combined group (MAP I and MAP II).

All of the MAP II students thought their intellectual skills were equal to those of juniors and seniors they met in their classes, and 82% agreed that they did not have a difficult time in classes during the past year. Ninety-seven percent of the students felt their baccalaureate degree would be of the same quality as the degree of other BGSU students, and 43% agreed they studied harder than ever before.

Fifty-nine percent of the MAP II students did not expect to receive accelerated status when they joined MAP. This was a marked difference from the 73% of MAP I students who reported they did not expect to receive accelerated status.

TABLE 6: Frequency of Agreement and Disagreement to General Questions (Percentages)

Item	Strongly Agree		Agree		Disagree		Strongly Disagree		SA	A	D	SD
	MAP I	MAP II	MAP I	MAP II	MAP I	MAP II	MAP I	MAP II	MAP I & II			
I have had a difficult time this year in my classes.	0	0	19	18	44	50	37	32	0	18	47	35
I feel my intellectual skills are equal to juniors and seniors in my classes.	33	48	63	52	0	0	4	0	41	57	0	2
I would recommend the time-shortened option to other students.	35	39	50	57	11	4	4	0	37	54	7	2
My degree will be of the same quality as the degree of other students at BGSU.	60	61	32	36	0	4	8	0	60	34	2	4
I have had to make personal decisions sooner than I wanted to because of accelerated status.	15	4	37	32	41	54	7	11	9	35	47	9
I expected to get accelerated status when I joined MAP.	4	7	23	33	54	33	19	26	6	28	43	23
I study harder now than ever before.	8	18	35	25	46	46	11	11	13	30	46	11
Accelerated status has created more problems for me than it's been worth.	0	0	4	7	41	39	56	54	0	5	42	53

(N=55)

Overall, despite the disadvantages and problems that acceleration brought, the advantages, again, seemed to outweigh them. Of the twenty-eight MAP II accelerated students, twenty-seven (97%) of them said they would recommend the time-shortening option to others; a similar response was given by 82% of the MAP I students. Ninety-three percent (all but two students) of the MAP II students disagreed with the statement that "it has created more problems for me than it's been worth." Ninety-six percent of the MAP I students shared this view.

However positive these responses may be for both years, we have been struck by the fact the experience of acceleration wasn't necessarily a decidedly positive one for all students, and that willingness to recommend the time-shortened option to others depended greatly upon the reality of students getting their degree "time-shortened." In a separate analysis, not reported here, MAP I and II students who saw their degree as being time-shortened (N=37), and those who did not expect a time-shortened degree (N=17) differed greatly. All of the students who anticipated a time-shortened degree agreed they would recommend the option, while 71% of those who expected not to experience a time-shortened degree recommended the option.

While the questionnaire data has been helpful in understanding the advantages, disadvantages, and general feelings of the accelerated students, the discussions held with them have been of immense help in establishing another perspective on the program. The discussions turned out to be, in some respects, even more probing than the questionnaire, and certainly as intense; they were often wide-ranging in topic and were characterized by student interest in conveying thoughts to the staff.

At least four themes emerged from the discussions which were not covered

adequately in the questionnaires. These are: (1) MAP students were not impressed by the fact that they were accelerated; they were still perplexed at how it really happened and still were involved in trying to figure out what acceleration meant; (2) they were glad to be rid of requirements, feeling that many of them were repetitive and coercive. The students who were in the comparison group of students were especially verbal about this, noting that their classes dominated by juniors and seniors were more intellectually stimulating than the classes they had experienced their freshman year; (3) there were small "hassles" regarding technical adjustments to acceleration such as housing, new schedules, and revisions of academic plans which were bothersome, but not overwhelming; and (4) students felt the great advantage of the MAP experience was their freshmen year, characterized by a sense of community generated through common classes and the living-learning experiences. This sense of community had more of an impact on them than acceleration, and students gave the impression that they would not have exchanged one for the other.

It should be explained here that these students experienced MAP when it was associated with a set of curricular programs such as the Little College and the Humanities Cluster College and living in Prout Hall. This will no longer be the case. Students who take the Time-Flexible Degree Option may or may not be involved in any common curricular programs. While the students in the comparison group did not share classes or residences, a sense of camaraderie existed with them also. They felt they were participating in an educational experiment that was interesting and worthwhile.

It is difficult to capture all of the experiences and thoughts conveyed to us by the accelerated students; therefore, we have elected to conclude this section by presenting some representative comments from the MAP II students.

"Comments from MAP II Students"

"I think it would help students who may be accelerated if they are counseled ahead of time on what courses might be waived so they don't take them, and so they know the whole story of what might happen."

"I'm going to Spain for my Spanish minor; no time-shortening will be realized but I will have a double major in education."

"When people inquire about my class rank I hesitate between sophomore and junior. Like a junior I am already worrying about graduation; but, like a sophomore, I hesitate to admitting too much knowledge."

"I would much rather earn my BA as soon as possible; then after I found out what I needed I could study on my own to fill in the gaps."

"Personally, it has clarified several of my beliefs; (things that I would have procrastinated about, I was forced to make a decision)."

"I enjoy undergraduate college life, I hate to miss a year of it."

"I'm sure I gained much more than I lost."

"Faculty didn't understand (about acceleration), despite your (MAP staff's) contention that the faculty had it explained to them."

"I do feel cheated out of growing in certain areas since I will not be able to take all the courses I want."

"I may work for Common Cause and travel." (during the fourth year)

"I had to inform my advisor about the program, what it meant and try to figure out between us how it would affect my program."

"I think I've had a big enough taste of college life."

"Knowledge and experience are not synonymous with time."

Transfer/Stop-out Phenomenon

A new and surprising phenomenon was discovered among the MAP II students. The previous year's accelerated students, except for an occasional quarter of off-campus study, were still at BGSU at the end of their junior year. The MAP II accelerated students, though, proved not to be as stationary. Eight of them chose to either transfer to another institution or take the year off from school. Considering the fact that they had earned nearly a year's worth of general education credit at BGSU and could forge ahead in their academic program, it was surprising that they had deviated from this course. All eight students were contacted in an attempt to find out what the reasons were for their departure, where they had gone, the acceptability of their acceleration credits, and their future plans.

It was clear that four of the students had chosen other institutions because of an interest in a major not available at BGSU, for example, Early Childhood Education or Administrative Science. One student transferred to another institution because her fiance was there. Another student transferred because "BGSU didn't seem to be the place for me; my friends went to Ohio State University and it seemed to be a good idea. In any case, I was in no rush to graduate."

The two students who did not immediately transfer to other institutions had quite different motivations; for different reasons they had intentionally "stopped-out" of college. One took a full year off to earn money in order to attend St. John's College in Santa Fe, and the other went on an extensive hitch-hiking tour of the United States and Canada. The latter student indicated "I have been working and just generally living and learning about myself and the world." This student returned to BGSU the following Fall.

The student going to St. John's submitted a five-page paper in place of the questionnaire explaining his decision to seek a "true liberal education."

Since all freshmen start at the same point at St. John's, none of the credit was relevant for the student. The entire tone of the student's thesis was that the transfer of credit was the furthest thing from his mind in his choice of St. John's.

The students had dissimilar experiences when they attempted to have their acceleration credits accepted at the transfer institutions. One student indicated that negotiations had to occur to have the acceleration credit be substituted for specific courses and electives. Two of the students had all of their acceleration credits accepted (at Cleveland State and Kent State), and were going to be able to graduate within a three-year period. One of these students received even more credit through proficiency exams, and the other was going to attend summer school. The four other transfer students all chose to go to Ohio State University where none of their accelerated credits was accepted. In one case a student suggested that some credit may be accepted if it could be allocated to specific courses.

It is difficult to foretell if accelerated students will continue to transfer; it did not happen the first year, and there is some reason to suggest it may not happen again. Students in the MAP Project often did not plan on being accelerated, and may well have made alternative plans concurrently with acceleration. Accelerated students in the future will apply specifically for the time-flexible option, and will probably integrate the acceleration possibility into their overall academic plan at BGSU.

PREDICTORS OF ACADEMIC PERFORMANCE (JUNIOR YEAR)

In the first follow-up study, a "research note" was included which discussed an analysis of the best predictors of academic performance in the junior year using the accelerated students' GPA as the criterion measure. Stepwise regression was used for this purpose.

The stepwise regression technique determines the independent variables (predictors) which provide the best prediction of the dependent variable (criterion) using the fewest number of independent variables.[4]

Using the sample of 31 MAP I students, the best predictor of academic performance was found to be Freshman GPA; it had a correlation of .74 with the criterion variable, Junior GPA. There was also a high correlation between Junior GPA and High School Rank (.47) and also with scores on the URE Natural Science Exam (.45).

It was recommended that these findings be interpreted cautiously since the sample was small (31), and that they should be verified using the next group of accelerated students (MAP II). Unfortunately, the MAP II sample size turned out to be even smaller (28).

When stepwise regression was applied to MAP II students, similar results occurred. Freshman GPA was again found to be the best predictor of Junior GPA (.64). The high correlation between Junior GPA and High School Rank also held up (.57); however, that between the URE Natural Science Exam and Junior GPA did not (-.10). Instead, a high correlation, though negative, was found with the URE Humanities Exam (-.37).

A second analysis combined both MAP I and MAP II students into one group (N=59) in order to provide more reliable results. Simple correlations, multiple correlations and R-squares (cumulative variance explained) resulting from this analysis are reported in Table 7.

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[4] A further explanation of this technique is provided in "An Experiment in 'Less Time', p. 27. Technical information on the program is available in Version 5 of the Statistical Package for the Social Sciences Manual, McGraw-Hill. 1970.

Table 7: Simple Correlation, Multiple Correlation, and R Square for 10 Predictors and Criterion Variable (Junior Grade Point Average) (n=59)

Predictors	Correlation	Multiple Correlation	Cumulative Variance Explained
Freshman GPA	.684	.684	.468
Theoretical Orientation (OPI)	-.075	.709	.502
Humanities Exam	-.020	.723	.522
Social Science Exam	.139	.738	.544
Estheticism (OPI)	.321	.756	.572
High School Rank	.531	.765	.586
Thinking Introversion (OPI)	.179	.771	.594
Watson-Glaser Exam	.148	.774	.599
Natural Science Exam	.175	.776	.601
ACT Composite	.246	.776	.601

Ten predictors are used in the analysis: Freshman GPA, High School Rank, ACT Composite score, Watson-Glaser score, scores on the Undergraduate Record Area Exams (Humanities, Social Science and Natural Science), and three measures from the OPI (Theoretical Orientation, Estheticism, and Thinking Introversion).

It was found that the variable that was the best predictor of Junior GPA was, as expected, Freshman GPA (.68). High School Rank and Estheticism (an interest in artistic matters) also exhibited high correlations with the criterion (.53 and .32, respectively). The ten predictors taken together explained a total of 60% of the variance in Junior GPA. The fact that Freshman GPA explained 47% of the variance by itself suggests that heavy reliance upon freshman GPA as a determiner for accelerated status is justified until such time as other measures besides GPA become viable criteria by which to judge student success.

The use of other criteria though, except for research purposes, is unlikely. While the original concept of the MAP Project stressed such criteria as the student's ability to think critically and to solve problems, no regular measure of such capabilities is taken by the University, nor is there any necessity for a student to directly demonstrate such abilities prior to graduation. To a significant degree, then, the original concept of MAP has not been tested in the time-shortened degree program. As long as performing well in terms of measures like GPA and the Graduate Record Exams remain important in academe, earlier performance on those measures (e.g., Freshman GPA and Undergraduate Record Exams) will probably remain the best predictor of that later performance.

THE SENIOR YEAR

Of the thirty-one students who were accelerated in the first year of the MAP Project (1972-73), eleven of them had graduated within a three-year period. One student, who had graduated Fall Quarter, had left to teach in an industrial college in Bogota, Colombia; another who graduated at the end of Winter Quarter was working as a bank teller but had a contract to begin teaching the following fall (1975). The other nine students graduated at the end of Spring Quarter, 1975.

Although questionnaires were sent to all eleven of the MAP I students, the analysis of the questionnaires will not be included here in detail. Rather, this report will concentrate on the interviews with the seniors (the questionnaire repeated many of the interview questions in different form); the questionnaires will be best analyzed when all 31 are accumulated and tabulated according to time of graduation. It is expected that attitudes and opinions will vary considerably. The 11 students who graduated within three years would be expected to have very favorable responses, as was generally the case in the interviews. The important reason for looking at these 11 students was not to verify the expected positive response, but to discern how the accelerated student related to the world beyond the baccalaureate. Each of the nine seniors graduating in the Spring Quarter was interviewed. The interviews lasted, normally, from 45 minutes to one hour. The nine students were made up of 4 men and 5 women; four of the students had majored in Elementary Education; two in Philosophy; and one each in Sociology, Political Science, and Ski-Resort Management (self-designed major).

Academic Performance

The academic performance of all eleven graduates turned out to be rather

exceptional. Three graduated summa cum laude (one with a 4.00 average); two graduated magna cum laude (3.7 - 3.9); five graduated cum laude (3.5 - 3.7). The eleventh student had a 3.22 grade point average.

Essentially, this suggests that some of the "best and brightest" of freshmen students become accelerated, and continue to exhibit high academic performance during their junior and senior years. The average number of hours these eleven students graduated with was 193, with one student totaling as many as 216 hours. These students, on the average, had 10 hours more than they needed for graduation from BGSU.

Employment and Graduate School

Seven of the nine students who had graduated in Spring Quarter had finalized plans for either employment or graduate school. Two students had secured teaching positions at the elementary level; one was going to work for a social work agency; one was becoming a management trainee; and three were going on to continue their education (at a law school, a school of divinity, and in philosophy). Two of the elementary teachers had yet to secure their jobs; however, both saw their joblessness as a function of the current market, rather than a consequence of acceleration. The two students who had graduated earlier planned on continuing in their teaching positions.

The students who were going to graduate school reported that the topic of their accelerated status never came up. Those who interviewed for positions suggested their employer had no reaction to the acceleration. In the one case where the question of acceleration did arise, the employer was impressed by the grades of the student, regardless of acceleration. One employer was impressed by the student's self-designed major.

Senior Comments On the Acceleration Option

The seniors reaffirmed earlier findings that the benefits of acceleration were not unidimensional. One woman student suggested at least five benefits that had accrued to her: 1) she avoided many required courses, 2) she could get married a year earlier, 3) acceleration provided her additional motivation for studying, 4) it also provided "status" and 5) she saved money.

Consensus about the benefits of acceleration centered around saving money, getting into graduate school, or getting a job a year earlier; but perhaps the most uniform opinion was that acceleration had let students avoid a number of requirements. Students expressed this in various ways:

"I wasn't interested in general education courses, my major was of primary interest to me."

"I was bored by the requirements during the freshman year."

"I could see a purpose in my major that I could not in other courses."

"I avoided less stimulating courses."

Weaknesses of acceleration for these students were sometimes expressed in terms of missed courses but, overall, comments were rather disparate. Several of the students remembered some anxiety during those first few weeks of being a junior regarding their ability to compete with juniors and seniors, but that soon dissipated. They also recalled an uneasiness about what it meant to be a junior. Two students felt resistance on the part of academic advisors to deal with the irregularities caused by acceleration. Another remembered her first reaction was the feeling that she was going to be robbed of her fourth year of college; "College years are supposed to be the best years of one's life, and here I am going to miss it." However, this feeling was only temporary.

All of the students said they would recommend acceleration to others, even though many specified conditions. They saw acceleration as appropriate "especially for people who enjoy being busy," "only for those who know where they

are going and have a strong background," and, "for students who plan out their programs."

Two students felt strongly that, while they would recommend acceleration, they would recommend more the educational experience of MAP as a freshman where students took many of the same classes and lived together. They saw acceleration as a bonus.

It should be remembered that the seniors who were interviewed probably had the most positive view of acceleration since, except for the two that graduated earlier, they were the only ones who achieved graduation in three years. It would be expected that they would have a more favorable view of the option than those whose expectations for a three-year degree were not met. Nevertheless, these seniors did cite three ways they thought the program could be improved: 1) earlier notification of accelerated status, 2) more help in scheduling courses, and 3) orientation regarding what it means to be a junior (including opportunities and responsibilities).

DISCUSSION AND CONCLUSIONS

The MAP Project led a controversial existence on its way to facilitating the adoption of a Time-Flexible Degree Option at BGSU. It is not clear that data on student performance were a critical factor in that adoption process. However, a wealth of data has been collected and reported on the accelerated students thus far. Before outlining the general conclusions drawn from the data, though, we would be remiss in not mentioning several limitations in the follow-up studies themselves.

One immediately apparent limitation is the small number of students who have been accelerated. It is not known if the findings reported here would hold for larger and more diverse groups of accelerated students. On the other hand, the current parameters for eligibility (and student interest) probably assure that large and diverse groups of accelerated students will not be forthcoming.

The most serious limitation of the studies, though, is the lack of an adequate control group with which to compare the experiences of the MAP students with similar students who were not accelerated. No control group was constructed the first year of the program since no accurate perceptions existed of what the program would be like; and during the second year, few control group members showed any interest in the acceleration option. Therefore, evidence that similar students have not had similar experiences or some degree of time-flexibility is not reported here; the data reported speak strictly to the experiences, performances, and achievements of the MAP I and MAP II students.[5]

Despite these limitations, the data that have been gathered by means of

[5]It should be noted that, while an adequate control group for this program could not be maintained, more limited programs within the MAP Project (e.g., the Little College) did manage to utilize control group designs due to their less comprehensive need for student commitment and participation.

questionnaires, discussions, and interviews is considerable. By using several modes of data collection, we have been able to verify and recheck our observations and feel confident about drawing the following conclusions:

1. The MAP Project showed that a highly select and able group of students can be accelerated to junior status on the basis of their freshman performance, and that their academic performance as measured by GPA remains high as juniors (average GPA of 3.57). The best predictor of that performance was the freshman grade point average, and performance was consistent across colleges (Arts and Sciences and Education) and during the junior year (Fall, Winter, Spring).

   These results are not surprising. The limiting of acceleration to a highly select group of students greatly increased the chances that the accelerated students would perform well as juniors.

   These same students suffered no serious social or personal problems. While questions of personal identity did remain problematic for some, these questions were not associated with acceleration. Also, these students said they did not feel "rushed" into making decisions about a future career or major.

   The MAP Project did attempt to break the "lockstep" of a four-year degree program for students. Nevertheless, it must be recognized that, while students in the Project were successful in terms of academic performance and social and personal adjustments, the success of the Project must be qualified by the type of students accelerated - students who were characterized by their maturity and intellectual orientation. It should also be mentioned, however, that the Project may well have contributed to a supportive environment in which other time-shortening techniques have

been made increasingly available to all BGSU students, such as the College Level Examination Program (CLEP).

2. Even within the MAP Project, the "reality" of a three-year degree was not available to all accelerated students. The major hurdle for students was apparently the necessity of completing prerequisites for a major. However, students who were not going to graduate in three years seemed to be experiencing more flexible programs and avoiding courses they saw as repetitive and boring. Some pursued a double major. While all of this may be beneficial, it would seem that care should be taken to define more precisely which students can benefit from the MAP concept in terms of reduced time, and which students can benefit in other ways.

Students, in general, saw three other major benefits of acceleration: saving money, getting a job or entering graduate school a year early, and doing something different their fourth year (e.g., travel or work experience). These benefits suggest that the orientation of the program to a "time-flexible" instead of a time-shortened orientation is justified. Still, it can be concluded that the three-year degree, per se, seems to create no problems for graduate schools or employers; the academic performance of the accelerated student probably outweighs any other concern.

3. Initial student enthusiasm regarding the MAP Project was not indicative of interest in either a time-flexible or time-shortened degree, but rather an interest in small classes and belonging to an "experimental community".

It is expected that limited student interest in the time-shortened degree will continue as long as the option is divorced from a specific curricular experience. While students who indicate an interest in acceleration are encouraged to participate in the Little College and other

interdisciplinary programs, their participation is not required by the colleges as a prerequisite for acceleration.

The fact that a group of students involved in a small, well-organized, community-based program recommend the time-shortening option makes it difficult to partial out the credit due to the time-shortening option and the praise given the other aspects of MAP. That question will be answerable in the future as the curricular programs and acceleration are separated. Our observation is that the combination proved more popular than either component by itself and that the relative importance of each component depended upon the individual student.

Future Study Plans

"More of the same" should probably not be the order of the day in the next report on accelerated students. It would seem that the logical next step is to wait until the great majority of the MAP students has graduated so that two factors can be investigated: 1) the experience of the accelerated student immediately after graduation, and 2) the analysis of the data according to the time-frame in which a student actually graduated.

Studies of newly-accelerated students should also be initiated. The most obvious reason for these studies is that the acceleration option will be made available to all BGSU students, not just those who participated in a special curricular sequence. A related factor is the series of changes that have occurred in the program itself; for example, students will not be required to take the Little College and will be required to submit plans on how acceleration will be integrated into their overall academic plan. These changes may affect the results of the option, and most certainly should produce a different type of student coming forward. This student will, most likely, have more practical goals and less interest in "experimental and innovative" programs. How

different this new student will be from the students reported in this follow-up study has obvious implications for the utility of the findings reported here.

In summary, future directions for the continued study of time-shortened and time-flexible degrees will, in all likelihood, focus on questions surrounding the experience of the MAP student after college, and the "new" accelerated student who will pursue the now permanent Time-Flexible Degree Option.